

4. In cases in which the function of the semicircular canals was otherwise demonstrable as wanting, reflex symptoms were not induced by the changes in temperature.

5. The nystagmus was, in the majority of all the cases observed, accompanied by dizziness and loss of balance and sometimes by malaise, nausea, vomiting, and insensibility of short duration.

6. In the more marked instances of disturbance of balance the sensation of movement and the direction of loss of balance corresponded, in the majority, to the symptoms evidenced in disease of the vestibular apparatus.

The Effect of Radium Bromide upon the Labyrinth.—EWALD (*Zentralblatt für Physiologie*, 1905, No. 10), in these experiments upon pigeons, used a small glass bulb, 2 mm. in diameter, containing about 3 mg. of radium bromide, introduced through a small opening in the skull and so placed as to approximate the labyrinth without coming into contact with it. The glass bulb was allowed to remain in place for several hours and then removed and the operative field protected; the results of the experiment widening themselves several days later, in typical labyrinth symptoms proportionate, in time of their onset and in their severity, to the duration of exposure to the influence of the radium and finally becoming constant.

Control experiments, made with empty glass bulbs, under the same operative conditions, satisfactorily demonstrated the fact that the symptoms educed were due to the influence of the radium, the complex of symptoms in the cases in which the radium was used presenting the typical disturbances of orientation characteristic in removal of the labyrinth.

Cases of Erysipelas in the Warschauer-Ujazdow Military Hospital in a Period of Ten Years.—V. MAXMOWITSCH (*Archiv für klin. Medizin*, Bd. lxxxiii.) states that in no less than 29 per cent. of the observed cases the erysipelas appeared as a complication of aural disease, and that the bacteriologic examination of the air in the various wards showed a preponderance of the staphylococcus pyogenes aureus in the aural department only.

The majority of the cases occurred in the winter and early spring months; 17.5 per cent. in March and 1.5 per cent. in September, for instance.

The Treatment of Suppurative Middle-ear Disease by Means of Compression Hyperæmia.—W. KEPPLER (*Zeitschrift für Ohrenheilkunde*, Bd. l., Heft 3), encouraged by the favorable reports of the results of the application of pressure hyperæmia in cases of suppurative processes in the extremities, applied this method to the treatment of similar conditions in the head, and especially in the ear, using as a compression apparatus a woven elastic rubber band from 2 to 3 cm. in width, beset with hooks and eyelets, to facilitate varying degrees of pressure, the maximum being indicated by the production of a reddish-blue swelling of the superficial enclosed area, and in some cases of mastoid complication, of a deep red, postaural oedema. The duration of the applied pressure was from twenty to twenty-two hours, with a

two-hour intermission, which was lengthened as the suppurative process subsided and the accompanying pain decreased.

In all the cases treated, in addition to the circumjacent pressure, due provision was made for the evacuation of the suppurative product, the drum-head, if intact and bulging, was freely incised, or, if there was a small perforation, this was enlarged; in the cases of mastoid abscess the cavity was opened in the minimum degree consistent with the drainage, the subsequent daily dressing consisting in pressure, to facilitate the extrusion of superficial pus accumulations and the application of sterile gauze, the wound being neither mechanically drained nor tamponed.

Of the 21 cases thus treated, 11 were acute and 10 chronic, and the former, with one exception, presented such symptoms of mastoid implication as tenderness on pressure and œdema; all of these cases resolved without coming to operation, the duration of treatment being from two to four weeks.

Of the chronic cases, but 2 recovered without operation upon the mastoid, 1 after removal of a polyp, and the other after a postaural incision.

In the cases which came to operation, the bone was found to be excessively vascular, its diseased portions distinctly limited, and the period of after-treatment required was, on the average, shorter than in corresponding cases in which compression had not been a part of the preliminary treatment.

HEINE states, as the result of his observations in 19 cases, that he is led to agree with Keppler that cases of mastoiditis, with infiltration of the soft tissues and abscess formation, are the most favorably affected by compression with its vascularizing results.

Of the 19 cases, of which 4 were binaural, 2 were acute without perforation of the drum-head, 3 were acute with spontaneous perforation of the drum-head, 6 had accompanying tenderness on pressure over the mastoid, 5 had mastoiditis with infiltration of the soft tissues, and 3 mastoiditis with abscess.

Of the total number, 9 cases resolved, 4 were still under observation, and 8 came to operation, including 1 case of imperforate drum-head, which returned with recurrence and mastoid implication fifteen days after apparent resolution, and 1 case of superficial mastoid infiltration, with a recurrence at the end of twenty-four days.

A comparison of the observations of Keppler and Heine and a combined consideration of their results emphasize the importance of the limitation of such investigations to observers qualified in the minute estimation of operative conditions, the danger being that the abortive attempt by compression hyperæmia, like the abortive attempt in production of the opposite effect, from the application of cold to the mastoid region, may mask symptoms which would urge surgical intervention as the safest course.